

95. The method of claim 94, wherein said I/O resources comprise I/O capacity; and wherein said method further comprises modeling said I/O capacity based at least in part on said monitored workload distribution across said at least two storage devices or partitioned groups of storage devices.

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96. The method of claim 95, wherein said at least one of said I/O resources further comprise buffer memory space of said information management system; and wherein said method further comprises managing said I/O resources by balancing said I/O capacity with said buffer memory space to ensure uninterrupted delivery of said continuous media data to said plurality of viewers from said at least two storage devices or said at least two partitioned groups of storage devices.

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97. The method of claim 96, wherein a maximum actual Skew value of at least one of said storage devices or partitioned groups of storage devices is greater than or equal to about 2.

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98. The method of claim 96, wherein said buffer memory space comprises a part of an integrated cache/buffer memory of said storage system.

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99. The method of claim 98, wherein said method further comprises limiting a size of said buffer memory space by implementing a read-ahead buffer limit.

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25 100. The method of claim 93, wherein said I/O resources comprise I/O capacity and buffer memory space; and wherein said monitoring of workload distribution comprises monitoring a number of viewers that are reading data from each of said at least two storage devices or partitioned groups of storage devices out of the total number of viewers being served by said storage system; and managing said I/O resources by balancing said I/O capacity with said buffer memory space to ensure uninterrupted delivery of said continuous media data to said viewers reading data from said at least two storage devices or partitioned groups of storage devices.

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101. The method of claim 93, wherein said I/O resources comprise I/O capacity and buffer
memory space; wherein said monitoring of workload distribution comprises monitoring the
5 number of existing viewers served from each of said at least two storage devices or partitioned
groups of storage devices, and monitoring the data consumption rate of said existing viewers;
and wherein said method further comprises managing said I/O resources by balancing said I/O
capacity with said buffer memory space based at least in part on said monitored number of
existing viewers and said monitored data consumption rates of said existing viewers, and
10 determining whether or not a capacity of said system is sufficient to support at least one
additional viewer based at least in part on said balancing of said I/O capacity with said buffer
memory space.

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15. 102. The method of claim 93, wherein said I/O resources comprise I/O capacity and buffer
memory space; wherein said monitoring of workload distribution comprises monitoring the
number of existing viewers served from each of said at least two storage devices or partitioned
groups of storage devices, and monitoring the data consumption rate of said existing viewers;
and wherein said method further comprises determining a read-ahead size by balancing said I/O
20 capacity with said buffer memory space based at least in part on said monitored number of
existing viewers and said monitored data consumption rates of said existing viewers, setting a
cycle time based at least in part on said balancing of said I/O capacity with said buffer memory
space; and determining a number of read ahead data blocks based at least in part on said cycle
time, said monitored data consumption rate, and a size of said data blocks.

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103. The method of claim 93, wherein said I/O resources comprise I/O capacity and buffer
memory space; wherein said monitoring of workload distribution comprises monitoring the
number of existing viewers served from each of said at least two storage devices or partitioned
30 groups of storage devices, and monitoring the data consumption rate of said existing viewers;
and wherein said method further comprises managing said I/O resources by balancing said I/O

capacity with said buffer memory space based at least in part on said monitored number of existing viewers and said monitored data consumption rates of said existing viewers, and determining whether or not a capacity of said system is sufficient to support at least one additional viewer based at least in part on said balancing of said I/O capacity with said buffer
5 memory space; and wherein said method further comprises determining a read-ahead size by balancing said I/O capacity with said buffer memory space based at least in part on said monitored number of existing viewers and said monitored data consumption rates of said existing viewers, setting a cycle time based at least in part on said balancing of said I/O capacity with said buffer memory space; and determining a number of read ahead data blocks based at
10 least in part on said cycle time, said monitored data consumption rate, and a size of said data blocks.

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104. A method of monitoring I/O resource utilization for delivery of information to a plurality of viewers from an information management system including storage system I/O resources and at least one storage device or at least one partitioned group of storage devices; said method comprising logically monitoring workload of said at least one storage device or at least one partitioned group of storage devices.

20 105. The method of claim 104, wherein said logical monitoring comprises:

monitoring a number of viewers being served by at least one logical volume contained at least in part on said at least one storage device or partitioned group of storage devices, and
25 monitoring the aggregated data consumption rates for said number of viewers being served by at least one logical volume contained at least in part on said at least one storage device or partitioned group of storage devices; and

30 determining an estimated total number of viewers for said at least one storage device or partitioned group of storage devices, and determining an estimated data consumption rate for